SBIR

Making an Impact on U.S. Manufacturing

MEP • MANUFACTURING EXTENSION PARTNERSHIP



Small Business Innovation Research (SBIR)

SBIR is a highly competitive federal grant program that opens opportunities and encourages U.S. owned and controlled small and mid-sized businesses (SMEs) to engage in Research and Development (R&D) with commercialization potential.

MEP Centers can provide a variety of support services to SBIR companies throughout the lifecycle of an SBIR project. As an R&D project evolves, MEP services can take on a different character to track the maturity of the technology as well as the company. MEP can play a pivotal role in helping SBIR research move from concept to market through services in areas such as product design, manufacture engineering, product concept testing, quality control/management, supplier scouting, and certification. MEP also connects SBIR awardees to other agencies and organizations for additional services and support.

The SBIR Programs are structured in three phases and MEP is there to provide support throughout the entire lifecycle.

Measuring Results

Results are based on Average Impacts per MEP Client that received services during the last 3 years. Over 50% of the SBIR Awardees -who are also MEP Clients- worked with an MEP Center before receiving their SBIR awards. On average, the size of an MEP client that is also an SBIR awardee, is 35 employees per establishment.

$429,007
Average total Sales

$128,641
Average Cost Savings

$159,531
Average New Client Investments

Average of
4 Jobs
Jobs Created or Retained

Preparing for Phase I (Project Feasibility)	Preparing for Phase II (Project Development and Prototype)	Preparing for Phase III (Commercialization)
• Proposal preparation help. • Identify R&D partners. • Obtain endorsements for future supply chain integration to include in proposals (ph1 and ph2). • Initial commercialization plans. • Technology Driven Market Intelligence to frame market opportunities. • Technology translation to capture value proposition and messaging (key for abstract).	• Strategy support for commercialization plan required as part of Phase II proposal • Technology Driven Market Intelligence to target partners and technical functional requirements for market acceptability • Identify R&D and industrial partners for T&E • Engineering support • Prototyping services • Technology scouting • Lean services (Value System Mapping, Lean Product Development, Quality Management, Toyota Kata)	• Technology Driven Market Intelligence to focus on priority market opportunity • Product development • Design for manufacture and assembly • Scout contract manufacturer • Develop in-house manufacture capability • Quality control and management • Scope possible future SBIR/ STTR Phase I proposals based on persistent technical challenges.

For more information about SBIR please visit: http://nist.gov/mep/services/innovation/sbir.cfm.

SMALL BUSINESS INNOVATION RESEARCH

COMMERCIALIZATION ASSISTANCE SERVICE MIX HELPS R&D MOVE TO MARKET

Composite Technology Development, Inc. (CTD) custom designs, manufactures and tests innovative materials and products for the energy, defense, and aerospace markets. A woman- and minority-owned small business, CTD has received numerous SBIR grants focused on developing and commercializing products for more than 10 years from federal agencies like NASA, Department of Energy and Department of Defense. Founded in 1988, CTD is located in Lafayette, Colorado, and has 30 employees.

Situation. CTD has developed many new technologies and products that meet true market needs. However, with staff focused primarily on development and innovation, CTD needed help getting products to market quickly and efficiently to capture market share and maximize profits. To address this, CTD approached Manufacturer's Edge, a NIST MEP affiliate, for guidance and expertise in product development, commercialization processes and program management methods.

Solution. Experts from ME led the company through a series of trainings, including Rapid Cycle Product Introduction (RCPI), Project Management workshops and Lean/Six Sigma training. Combining insights from RCPI and processes from the Project Management and Six Sigma workshops, CTD launched its newest product, the Portable Array Module (PAM™) for Expeditionary Power, which is already responsible for over $11 million in new sales to the U.S. military. In addition CTD has also formed a new company, Nishati, to focus on the solar power market and meeting the needs of the U.S Military. use

$11M in new sales

Brought new product from concept to market in less than 2 years

"Using CAMT's methodologies has enabled CTD to bring our newest product to market faster. The RCPI process was a key factor in CTD's ability to define the customer's critical requirements and to develop a product that met the customer's needs."

Patrick Hipp, Vice President, Business Development

JOIN THE DISCUSSION

Visit www.nist.gov/mep and join the conversation on MEP's *Manufacturing Innovation Blog* at nistmep.blogs.govdelivery.com.